



**Vogtle**  
units 3&4 Nuclear Development

**SOUTHERN COMPANY**

**Regulatory Information Conference  
Construction Inspection Program  
March 9, 2010**

Jim Davis  
Vogtle 3 & 4 Licensing Supervisor

The slide features a background image of the Vogtle nuclear power plant with its distinctive cooling towers. The text is centered and presented in a clear, professional font.

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**Vogtle**  
units 3&4 Nuclear Development

**SOUTHERN COMPANY**

**ITAAC Readiness  
&  
LWA/Construction  
Lessons Learned**

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**Vogtle**  
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**ITAAC Readiness**

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### SNC Involvement on ITAAC Readiness

- Industry Participation
- Development and review of ITAAC Completion Packages
- Development of Procedures
- Training & Tools
- Oversight of site specific ITAAC




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### Industry Participation

- NEI: CIP - NEI 08-01 Development and Improvement
- NRC/NEI Workshops for ITAAC
- ITAAC Closure Demonstration Project sponsored by DOE (participants SNC, Westinghouse and NRC)




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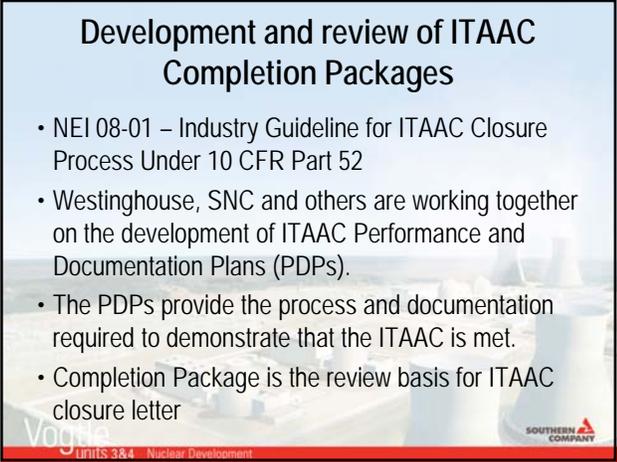
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### Development and review of ITAAC Completion Packages

- NEI 08-01 – Industry Guideline for ITAAC Closure Process Under 10 CFR Part 52
- Westinghouse, SNC and others are working together on the development of ITAAC Performance and Documentation Plans (PDPs).
- The PDPs provide the process and documentation required to demonstrate that the ITAAC is met.
- Completion Package is the review basis for ITAAC closure letter




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## Procedure Development

- ITAAC Performance and Documentation Plans
- ITAAC Program Description
- Construction Oversight Program
- ITAAC Closure Process



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## Training & Tools

- Licensing department is providing ITAAC training
- Oversight ITAAC tools are being developed
- Site specific ITAAC activities are identified in oversight processes



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## Oversight of site specific ITAAC

- Vogtle 3&4 project has three site specific ITAACs related to LWA activities.
  - 2 on backfill
  - 1 on waterproof membrane
- The SNC construction oversight program is monitoring ITAAC activities.
- ITAAC related issues are identified in the Corrective Action Programs.



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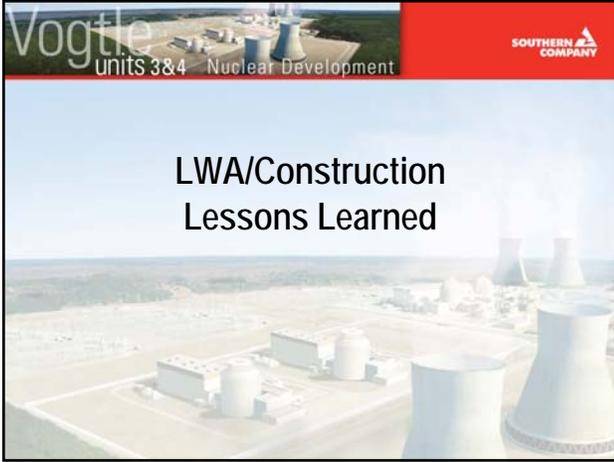
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**LWA/Construction Lessons Learned**

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**Construction Lessons Learned**

- EPC Roles & Responsibilities
- Program Development
  - FFD Program
  - Corrective Action Program
- Fabrication Vendors
- Oversight Role Evolving

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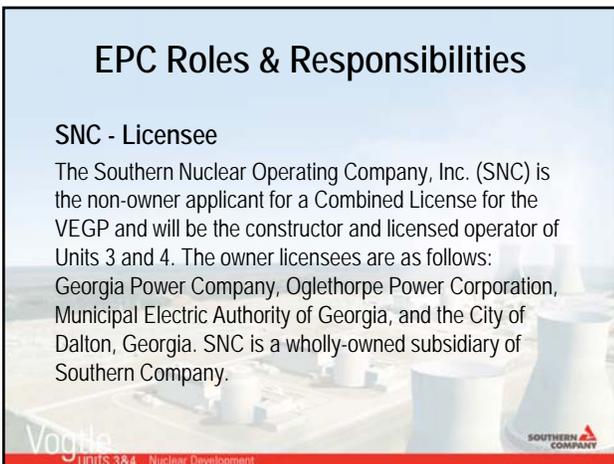
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**EPC Roles & Responsibilities**

**SNC - Licensee**

The Southern Nuclear Operating Company, Inc. (SNC) is the non-owner applicant for a Combined License for the VEGP and will be the constructor and licensed operator of Units 3 and 4. The owner licensees are as follows: Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and the City of Dalton, Georgia. SNC is a wholly-owned subsidiary of Southern Company.

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## EPC Roles & Responsibilities

### Consortium of Westinghouse and Shaw – Constructors

On April 8, 2008, the owner licensees for VEGP Units 3 and 4 executed a contract for Engineering, Procurement, and Construction (EPC) of the facilities with a Consortium comprised of Westinghouse and Stone & Webster, Inc. The Consortium will act as the AP1000 provider and architect-engineer for VEGP Units 3 and 4. Southern Nuclear, as the constructor of VEGP Units 3 and 4, has delegated responsibility for physical construction activities to the Consortium.



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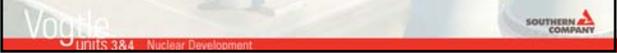
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## Lessons Learned

- Licensee is responsible
- Defining adequate oversight
- Selection of key project staff
- Personnel Training
- Building a strong safety culture



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## Program Development

- FFD Program
  - 6 Notification Events (3 Programmatic)
  - 1 level IV violation
  - 2 SNC audits with 17 findings
- Corrective Action Programs (CAPs)
  - 4 independent CAPs
  - Handoff and follow-up
  - Nonconformance – use as is and repair



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### Lessons Learned

- FFD
  - First time programs which are complicated need a lot of oversight and support
  - SNC is hiring a full time FFD program expert onsite to provide oversight and support to Construction FFD Program
- Corrective Action Programs
  - Ideal: a single CAP for construction used by all on-site entities
  - Interface points create opportunities for failure
- Nuclear Safety Culture



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### Fabrication Venders

- Licensee is responsible
  - Proposed Level IV Violation for CB&I
- Multiple Fabricator Stop Work Orders
  - Programmatic weaknesses
- Fabricators with new Appendix B programs are struggling to meet current expectations



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### Lesson Learned

- Level of Licensee oversight will be increased
  - Participation in vender qualification audits by WEC and Shaw
  - Participate in readiness review assessments prior to start of work
  - More surveillance activities for co-located on-site fabrication activities
  - Risk based oversight



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## Oversight Role Evolving

- Expectations are changing
- Struggling areas require increased oversight
- Oversight resource allocation is following a schedule and risk based approach
- Oversight is requiring increased readiness reviews
- Nuclear Safety Culture training/expectations



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